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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,756	11/18/1999	REINHARD BEUTH	9350-0144-0	6353

7590

12/06/2001

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EXAMINER

HON, SOW FUN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 12/06/2001

14

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-14

Office Action Summary

Application No.

09/442,756

Applicant(s)

BEUTH ET AL.

Examiner

Sow-Fun Hon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4-12 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Prosecution Application

1. The request filed on 09/14/01 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/442,756 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 112

2. Claims 18, 2, 4-12, 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear in independent claim 18, and dependent claim 7 whether the Markush group of PA 46 to PA 12, PA1212, the amorphous copolyamides PA 6,3-T, blends of polyamides, and the corresponding copolyamides all separate groups.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4-12, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douchet et al. (US Patent 5,472,754) in view of Yu (US 5,256,460).

Douchet et al. have a plastic material hose for fluids used in motor vehicles, such as the fuel or the windshield washer liquid (aqueous, aqueous-alcoholic or purely alcoholic) (column 1,

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lines 1-5) thus demonstrating that a composition for a fuel hose may also be used in a washer fluid hose in motor vehicles. Douchet et al. teach a method step of manufacturing the hose (column 1, lines 35-46). Douchet et al. also teach polyamides such as PA 11 and PA 12 (column 2, lines 1-5), as part of the material composition, but fail to teach the claimed specific composition.

Yu has a polymeric blend and a fuel hose (pipe) made of this blend (column 1, lines 6-8). The blend comprises a polyamide and a polyolefin with functional groups selected from the group consisting of carboxyl groups, esters, anhydrides and carboxylates. The carbon atom number of the carboxylic acid is preferably not lower than 10. The polyolefin is preferably 5 to 15 % of ethylene ethyl acrylate with respect to the total weight of the whole blend (column 1, lines 35-68) and 0.1 to 30 weight % of maleic anhydride functionalized ethylene-propylene. The blend also preferably comprises 0.1 to 40 % nylon 12 (column 2, lines 4-23).

Yu teaches that plasticizers cannot be used because they are extracted by gasoline which is a very good solvent of plasticizers (column 1, lines 22-24), hence teaching the importance of the minimization of gasoline extractables. Yu teaches that the hose has improved flexibility and resistance to fuel (column 1, lines 19-26).

Because Yu teaches that the hose composition has improved flexibility and resistance to fuel, it would have been obvious to one of ordinary skill in the art to have used the composition of Yu in the invention of Douchet et al. in order to obtain a hose with improved flexibility and resistance to fuel components.

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5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Reimann et al. (US 4,554,320) in view of Yamamoto et al. (US 5,948,503).

Reimann et al. have nylon molding materials having high impact strength containing as an additive, a copolymer of ethylene (abstract). These nylons have good high tensile strength, high heat distortion-resistance, good resistance to solvents, and ease of processing coupled with high impact strength and flexibility. In particular, Reimann et al. addresses the problem of increasing the flexibility of the nylons (column 1, lines 15-30). PA (Nylon) 612 is taught (column 3, lines 1-20) with 5 to 65 % by weight based on the nylon of a copolymer such as ethylene-methyl acrylate and ethylene-ethyl acrylate and other ethylene-alkyl acrylates (C_2-C_8 alkyl acrylates or methacrylates) (column 2, lines 45-65). Reimann et al., however, fail to teach the inherent specific tensile modulus of elasticity of the composition.

Yamamoto et al. teach that the tensile modulus of elasticity of the thermoplastic elastomer composition of 30 to 500 parts by weight of a polyolefin component and 10 to 500 parts by weight of a polyamide (column 3, lines 25-45) is 361 to 453 N/mm^2 (3690 to 4621 kgf/cm^2) (column 17, lines 55-60). The polyolefin component is taught to be ethylene-methyl acrylate copolymers, ethylene-ethyl acrylate copolymers, ethylene-propyl acrylate copolymers, ethylene-butyl acrylate copolymers (column 5, lines 60-68 and column 6, lines 1-5). The polyamide component is taught to be nylon 612, nylon 11 and nylon 12 (column 6, lines 30-40).

Because Yamamoto et al. teach that the tensile modulus of elasticity of a representative composition is 361 to 453 N/mm^2 , Yamamoto et al. demonstrate that the claimed tensile modulus of elasticity is inherent in the composition of Reimann et al.


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Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

8H
11/19/07


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

11/21/07